CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of the claims in the application.

1. (Currently amended) A method for monitoring eukaryotic cell integrity under ~~particular~~ test conditions, ~~said~~ the method comprising

(i) subjecting cells to ~~said~~ the conditions,

(ii) adding adenosine diphosphate (ADP) to ~~said~~ the sample under conditions which allow the conversion of ADP to adenosine triphosphate (ATP) by cellular adenylate kinase,

(iii) detecting ATP in ~~said~~ the sample and relating that to the presence of adenylate kinase and thus to the ~~presence of lysed cells~~ eukaryotic cell integrity.

2. (Currently amended) A method according to claim 1 wherein the conditions of step (i) are those encountered during storage of a cell preparation.

3. (Original) A method according to claim 1 wherein in step (i) the cells are subjected to test conditions which are suspected of causing cell lysis.

4. (Currently amended) A method according to claim 3 wherein the ~~said~~ test conditions comprise addition of a reagent.

5. (Currently amended) A method according to claim 4 wherein the ~~said~~ reagent is a compound which is being screened for pharmaceutical application.

6. (Original) A method according to claim 5 wherein the cell preparation is a tumour cell line in culture medium and the reagent is suspected of having anti-cancer applications.

7. (Currently amended) A method according to claim 3 wherein the ~~said~~ test conditions comprise variation in an environmental factor.

8. (Currently amended) A method according to claim 7 wherein the ~~said~~ environmental factor is temperature, pH, pressure, irradiation or the presence of a particular gaseous environment.

9. (Original) A method according to claim 1 which is used to diagnose infection of the cells by a lytic virus.

10. (Previously amended) A method according to claim 1 which is used in toxicity testing.

11. (Original) A method according to claim 1 which is used to monitor the condition of eukaryotic cells in a sample, wherein after step (i) and prior to step (ii), cells which have been incubated under test conditions are lysed, and thereafter the quantity of ATP detected is used to determine the condition of the cells.

12. (Original) A method according to claim 11 wherein the sample contains a known amount of cells, and in step (i), it is cultured under test conditions which are suspected of affecting the condition of the cells.

13. (Currently amended) A method according to claim 12 wherein the ~~said~~ test conditions comprise addition of a reagent.

14. (Currently amended) A method according to claim 13 wherein the ~~said~~ reagent is a compound which is being screened for growth factor activity.

15. (Currently amended) A method according to ~~claim 3~~ claim 12 wherein ~~said~~ the test conditions comprise variation in an environmental factor.

16. (Currently amended) A method according to claim 15 wherein the ~~said~~ environmental factor is temperature, pH, pressure, irradiation or the presence of a particular gaseous environment.

17. (Original) A method according to claim 1 which is used to detect the presence of eukaryotic cells in a sample wherein, prior to step (ii), cells in the sample are lysed.

18. (Original) A method according to claim 17 wherein the sample is a sample of urine or milk.

19. (Currently amended) A method according to claim 18 which is used to diagnose the presence of a disease state in the animal providing the ~~said~~ sample.

20. (Previously amended) A method according to claim 11, the cells are lysed by addition of a lytic agent.

21. (Currently Amended) A test kit for ~~effecting~~ performing a method according to claim 1, which comprises substantially pure ADP, detection reagents and cell culture medium.

22. (Original) A test kit according to claim 21 wherein the detection reagents are luciferase/luciferin which is substantially free of contaminating enzymes.

23. (Cancelled) A method for detecting the presence of lysed eukaryotic cells substantially as herein before described.